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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,098	03/24/2004	Stephen J. Hall	H405 0001	4113

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EXAMINER

WRIGHT, ANDREW D

ART UNIT PAPER NUMBER

3617

DATE MAILED: 10/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/807,098

Applicant(s)

HALL, STEPHEN J.

Examiner

Andrew Wright

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-16, 18-23 and 25-29 is/are rejected.
- 7) ☒ Claim(s) 11, 17 and 24 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>6/23/04</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3, 4, 6, 12, 19-23, 27, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Saghri (US 6,431,933). Saghri shows a buoyant body board. The board could be used as a kickboard. The board has an undersurface (13), top surface (15), front (16) and rear (14). Saghri shows funnel member (18). At least a portion of the funnel member is disposed below the undersurface. The funnel member defines a channel (22). Defining the board front end as (16) and the board rear end as (14), then the channel front end (not numbered) has a larger cross sectional area than the channel rear end (33).

3. Regarding claims 3 and 4, the funnel (18) necessarily has some degree of rigidity. The funnel further comprises insert (30). Funnel (18) including insert (30) has sufficient rigidity to maintain its shape when it is wet and there is a flow of water or no flow of water.

4. Regarding claim 6, the funnels (18) are removably secured to the board (column 2, lines 52-62).

5. Regarding claim 12, there are plural funnel members (18). Each defines a channel.

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6. Regarding claim 19, the undersurface is substantially flat.
7. Regarding claim 20, the undersurface, when viewed in plan, has a curved profile along the sides.
8. Regarding claim 21, the cross sectional area of funnel (18) decreases monotonically.
9. Regarding claim 22, the funnel (18) is made of closed cell plastic (column 4, lines 49-50).
10. Regarding claim 23, the funnel is made of relatively flexible material (e.g. closed cell plastic). The funnel further comprises brace (30) made of relatively rigid material (column 5, lines 39-41). The brace can comprise a plurality of projections (34) that are coupled to the inside of the funnel wall (20). Therefore, the funnel comprises relatively flexible material (20) and relatively rigid braces (34).
11. Regarding claim 27, Saghri discloses a funnel member (18). The funnel member is coupleable to a kickboard and defines a channel with a front inlet that is larger than a rear outlet.
12. Regarding claim 29, Saghri shows a board (12) and a means for increasing drag. The means for increasing drag comprises a channel having a forward facing inlet and a rearward facing outlet. Claim 29 does not invoke 35 USC 112, 6th Paragraph, because the claim recites structure that performs the recited function.
13. Claims 1, 2, 5-9, 13, 27, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Fleming, III (US 6,089,935). Fleming discloses a board (10). The board

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is a waterski, but could be used as a kickboard. The board is inherently buoyant. The board has an undersurface (11), front end (13), and rear end (14). Funnel member (18) is disposed below the undersurface. The funnel member defines a channel. The cross sectional area of the forward end (24) is greater than the cross sectional area of the rear end (25) (column 3, lines 10-14).

14. Regarding claim 2, the channel is formed between the funnel member and the undersurface.

15. Regarding claim 13, the inner surface of the funnel member is curved.

16. Regarding claim 5, Fleming teaches that the funnel and board may be integrally formed (column 3, lines 55-56).

17. Regarding claim 6, the funnel is separate from the board and is secured to the board by fasteners.

18. Regarding claim 7, the funnel has flanges which extend along the undersurface (figs 1, 2, 4, and 5).

19. Regarding claim 8, the funnel is attached with fasteners that extend through the flanges and into the undersurface (figs 1, 2, 4, and 5).

20. Regarding claim 9, Fleming teaches that adhesive can be used (column 3, lines 49-50).

21. The elements of claims 27 and 29 are present in the Fleming apparatus.

Claim Rejections - 35 USC § 103

22. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

23. Claims 1, 6, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fleming, III (US 6,089,935). Fleming discloses the elements of claims 1 and 6. Fleming does not disclose welding. Fleming discloses that the funnel member may be made of metal (column 2, lines 36-40). Fleming discloses that the board is a ski of conventional configuration and construction. Fleming discloses different embodiments for fastening the funnel to the board. It is well known and common that metal skegs and fins can be welded to a metal undersurface of a waterski. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Fleming by welding the funnel member to the undersurface of the board. The motivation would be to use a known method of attaching a metal funnel to the waterski.

24. Claims 1, 12, 16, 18, 19, 20, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reden (US 5,080,620) in view of Thorne (US 3,255,472). Reden discloses a buoyant board (2) with funnel members (24) disposed below the board's undersurface. The funnel members comprise channels (28) which have a front inlet and rear outlet. Reden does not disclose that the area of the front inlet is greater

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than the area of the rear outlet. Reden does disclose that the tubes permit the formation of a rooster tail running from the rear of the board. Thorne shows a rooster-tail creating device for a waterski. Thorne shows a buoyant board and a funnel member disposed on the bottom of the board. The funnel has a front inlet and a rear outlet. The front inlet has a larger cross sectional area than the rear outlet. Thorne teaches that this creates a nozzle for enhancing the magnitude of the spray or plume (i.e. rooster tail). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Reden by making the channel (28) in the form of a nozzle, with an inlet area greater than the outlet area, as taught by Thorne. The motivation would be to enhance the magnitude of the rooster tail.

25. Regarding claim 12, Reden shows two funnel members (24) each with a channel (28).

26. Regarding claim 16, funnel member (24) has a rear surface. The rear opening penetrates the rear surface.

27. Regarding claim 18, funnel member has a front surface. The front opening penetrates the front surface.

28. The modified invention of Redden as described above contains all of the elements of claims 19, 20, and 29.

29. Claims 1, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saghri (US 6,431,933) in view of Saghri (US 5,498,184). Saghri ('933) shows the elements of claim 1. Saghri ('184) does not show a rectangular cross sectional profile

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or a triangular cross sectional profile. Saghri ('184) shows a body board with extensions similar to those of Saghri ('933). Saghri ('184) shows the equivalence between circular cross sectional profile (fig 10) and rectangular cross sectional profile (fig 3). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Saghri ('933) by configuring the insert (30) and therefore the funnel (18) to have a rectangular instead of circular cross sectional profile. The motivation would be to enhance the aesthetic nature of the apparatus. Furthermore, it is within the range of knowledge of the skilled artisan to make a triangular cross sectional profile. And it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Saghri ('933) by configuring the insert (30) and therefore the funnel (18) to have a triangular instead of circular cross sectional profile. The motivation would be to enhance the aesthetic nature of the apparatus.

30. Claims 1, 25, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fleming, III (US 6,089,935) in view of Taylor (US 6,533,625). Fleming discloses the elements of claim 1. Fleming teaches that the board is a ski that is conventional in configuration and construction. Fleming teaches that the ratio of cross sectional area of the front opening to that of the rear opening is preferably 2 to 1 (column 3, lines 15-19). Fleming also teaches that the front opening is generally U-shaped, and the rear opening is generally circular. Fleming does not disclose specific dimensions of the board or the funnel. Taylor shows a waterski. Taylor teaches that the width can be in the range of 5-12 inches. Therefore it would have been obvious to one having ordinary skill in the art

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at the time the invention was made to modify Fleming by making the board have a width in the range of 5-12 inches. The motivation would be to configure and construct the board in a conventional manner, as taught by Fleming. Using figure 2 of Fleming as a starting point, and using a board width of 7 inches, one wishing to make and use the Fleming apparatus could see that the diameter of the rear opening is roughly 2 inches. That makes the area of the circular rear portion roughly 3.14 square inches. And with Fleming's teaching that the front area is generally twice that of the rear area, that makes the front area roughly 6.28 square inches. Both fall within the ranges recited in claims 25 and 26. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Fleming by using a funnel with these dimensions. The motivation would be to optimize the Fleming apparatus through routine experimentation with the dimensional teachings of Taylor.

31. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fleming, III (US 6,089,935). Fleming discloses the board and funnel member. Fleming discloses that the funnel member is coupled to the board. Fleming does not explicitly recite method steps. The method steps, however, are inherent in the making and use of the Fleming apparatus. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to devise the recited method steps. The motivation would be to make and use the Fleming apparatus.

Allowable Subject Matter

32. Claims 11, 17, and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

33. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Martin, Jr. ('673) shows a waterski with a funnel. Hennebutte ('094) shows a kickboard with an integral funnel for increasing the drag of the board through the water. Haase ('843) shows a kickboard with an attachment for increasing the drag of the board through the water. Bolen ('266) shows a surfboard with a funnel.

34. Any inquiry concerning this communication should be directed to examiner Andrew D. Wright at telephone number (703) 308-6841. The examiner can normally be reached Monday-Friday from 9:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, S. Joe Morano, can be reached at (703) 308-0230. The fax number for official communications is 703-872-9306. The fax number directly to the examiner for unofficial communications is 703-746-3548.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andrew D. Wright
Patent Examiner
Art Unit 3617

Ar 10/27/04
**ANDREW D. WRIGHT
PRIMARY EXAMINER**